



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,823	04/15/2004	Christian Wagner	(Z)98003 PUS2	1743
7590 M. Robert Kestenbaum 11011 Bermuda Dunes NE Albuquerque, NM 87111			EXAMINER FULLER, RODNEY EVAN	
			ART UNIT 2862	PAPER NUMBER
			MAIL DATE 08/21/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/826,823

Applicant(s)

WAGNER ET AL.

Examiner

Rodney E. Fuller

Art Unit

2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 45-90 is/are pending in the application.
- 4a) Of the above claim(s) 47, 48, 53, 54, 57-60, 63, 65-78, 81-83 and 85-87 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 45, 46, 49-52, 55, 56, 61, 62, 64, 79, 80, 84 and 88-90 is/are rejected.
- 7) ☒ Claim(s) 79 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Rodney Fuller
Primary Examiner

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/15/04, 11/14/05.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species I – Figure 1 (claims 45, 46, 49-52, 55-56, 61-62, 64, 79-80, 84 and 88-90) in the reply filed on June 7, 2007 is acknowledged.
2. Claims 47, 48, 53, 54, 57-60, 63, 65-78, 81-83 and 85-87 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on June 7, 2007.

Remarks

3. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.
4. In the Office Action, mailed May 14, 2007, the examiner noted that the Oath / Declaration and the Utility Patent Application Transmittal do not set forth the priority information for applications 09/934,817 and 09/255,137. In response, the applicant indicated in the response, dated June 7, 2007, that a new declaration for application 09/934,817 will be prepared and submitted. The examiner notes that a new declaration for application 09/934,817 may correct the deficiencies of that application. However, the Oath / Declaration and/or the Utility Patent Application Transmittal form needs to be corrected in the present application. Currently, the Utility Patent Application Transmittal

for the present application, dated April 15, 2007, contains priority information of a "continuation of 09/934,817" only.

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following item(s) must be shown or the feature(s) canceled from the claim(s):

- a. (Claim 88): "an additional flexible thermal conductor" is not shown in elected Species I (Figure 1).

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

6. Claim 79 recites the limitation "said connecting structure" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 45 and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by Unno (US 5,805,273).

Regarding claim 45, Unno discloses "a light source (Fig. 1, ref.# 2) that emits radiation, an optical element (Fig. 2, ref.# 41) fastened in said mount, wherein said optical element is acted on by said radiation such that a heat supply results from said radiation that lacks symmetry (Fig. 1, ref.# 42) corresponding to the shape of said

optical element (column 8, lines 20-28), and a connecting structure (Fig. 2, ref.# 13, 14) between said mount and said optical element, having a symmetry characteristic that substantially does not correspond to the shape of the optical element (Fig. 2 shows the connecting structure that is does not correspond to the shape of the lens, i.e., circular)."

Regarding claim 46, Unno discloses "a light source (Fig. 1, ref.# 2) that emits radiation, an optical element (Fig. 2, ref.# 41) fastened in said mount, wherein said optical element is acted on by said radiation such that heat that results from said radiation lacks symmetry (Fig. 2, ref.# 42) corresponding to the shape of said optical element (column 8, lines 20-28), and a single- or multi-part thermally conducting element (Fig. 2, ref.# 13, 14) arranged in operative connection with said optical element and said mount and having a form of heat transport that effects an at least partial compensation of the asymmetry of temperature distribution in said optical element (Fig. 3 shows the resulting temperature distribution in the optical element)."

9. Claims 51, 52, 62, 79, 88 and 89 are rejected under 35 U.S.C. 102(b) as being anticipated by O'Brien, et al. (US 5,313,333).

Regarding claim 88, O'Brien discloses "a mount (Fig. 1, ref.# 20), an optical element (Fig. 1, ref.# 36) fastened in the mount, an additional flexible thermal conductor (Fig. 1, ref.# 30; column 2, line 63) at said optical element."

Regarding claim 51, O'Brien discloses "in which said optical element comprises a transmitting element." (Fig. 1, ref.# 36; column 3, lines 1-2)

Regarding claim 52, O'Brien discloses "in which said transmitting element comprises a lens." (Fig. 1, ref.# 36; column 3, lines 1-2)

Regarding claim 62, O'Brien discloses "having a slit-shaped image field." (Fig. 1, ref.# 36; column 3, lines 1-2)

Regarding claim 79, O'Brien discloses "in which said connecting structure comprises portions of different materials." (Fig. 1, ref.# 24, 26, 30, 44; column 3, lines 10-43).

Regarding claim 89, O'Brien discloses "wherein said optical element is selected from a group consisting of mirrors, lenses, prisms and transmitting elements." (Fig. 1, ref.# 36; column 3, lines 1-2)

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 49, 50, 55, 56, 61, 64, 80, 84 and 90 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unno (US 5,805,273) in view of O'Brien (US 5,313,333).

Regarding claims 80 and 84, Unno discloses a light source (Fig. 1, ref.# 2) that emits radiation, an optical element (Fig. 2, ref.# 41) fastened to said mount, wherein said optical element is acted on by said radiation such that heat that results from said radiation lacks symmetry (Fig. 2, ref.# 42) corresponding to the shape of said optical

element (column 8, lines 20-28), and a single- or multi-part passive thermally conducting element arranged in operative connection with said optical element and said mount and having a form of heat transport that effects an at least partial compensation of the asymmetry of temperature distribution in said optical element (Fig. 2, ref.# 13, 14).

Unno discloses the elements of the claimed invention as noted above but is silent regarding wherein said passively thermally conducting elements comprises an assembly of portions of different material. O'Brien disclose wherein said passively thermally conducting element comprises an assembly of portions of different material (Fig. 1, ref.# 24, 26, 30, 44; column 3, lines 10-43). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Unno to include wherein said passively thermally conducting element comprises an assembly of portions of different materials as taught by O'Brian for the purpose of compensating for thermal shifts in system focal length while maintaining radial and angular alignment of the lens relative to the source (abstract).

Regarding claims 49 and 55, Unno discloses "in which said optical element comprises a transmitting element." (Fig. 2, ref.# 41; column 8, lines 9-14)

Regarding claims 50 and 56, Unno discloses "in which said transmitting element comprises a lens." (Fig. 2, ref.# 41; column 8, lines 9-14)

Regarding claims 61 and 64, Unno discloses "having a slit-shaped image field." (Fig. 1, ref.# 7; column 5, lines 49-50)

Regarding claim 90, Unno discloses "wherein said optical element is selected from a group consisting of mirrors, lenses, prisms and transmitting elements." (Fig. 1, ref.# 7; column 5, lines 49-50)

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney E. Fuller whose telephone number is 571-272-2118. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

§

August 15, 2007

Rodney E Fuller
Primary Examiner
Art Unit 2862

